REMARKS/ARGUMENTS

The amendments and remarks hereto attend to all outstanding issues in the pending office action of 19 April 2005. Claims 1-8, 10-12, 14, 16-22, 24-29 remain pending in this application. Claims 1, 4, 6-8, 14, 17-18, 20, 23 and 25 are currently amended without adding new matter. Claims 9, 13, 15 and 22 are cancelled without prejudice.

In the Claims

Claim 1 is amended to incorporate limitations of claim 13, and to clarify the relationship of two controllers by identifying them as a first controller and a second controller, respectively.

Claim 4 is amended to add a definition of the terms r and θ . This amendment is supported in the specification as filed at paragraph [0045].

Claims 6-8 and 14 are amended to clarify that the controller specified therein are the first controller as identified in amended claim 1. Claim 14 is amended to remove the redundant limitation "and controller."

Claims 9, 13 and 15 are cancelled.

Claims 17 is amended to depend from claim 16, to correct a typographical error.

Claim 18 is rewritten as an independent claim, incorporating limitations of its previous base claim and intervening claims.

Claim 20 is amended to change the word "characteristics" to "properties" to clarify antecedent support.

Claim 22 is cancelled.

Claim 23 is amended by rewriting it as an independent claim, incorporating limitations of its former base claim 22.

Claim 25 is amended to depend from claim 23 instead of claim 22.

Support for the amendments to claims 1, 6-8, 14, 17, 18, 20, 23 and 25 is found in the corresponding claim(s) as originally filed. No new matter is added to the application through any of the claim amendments.

Response to Office Action

The following paragraphs follow the order of the paragraphs in the Office Action mailed 19 April 2005 in this application.

1. - 3. Claim Objections

Claims 17 and 18 were objected to as being improperly numbered dependent claims. Applicant has amended claim 17 to depend from claim 16, and has rewritten claim 18 as an independent claim. We request withdrawal of the objection to claims 17 and 18.

Claim 15 was held to be a substantial duplicate of claim 10. Applicant has cancelled claim 15.

4. - 5. Claim Rejections - 35 U.S.C. §112

Claims 4, 5, 9 and 20 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

In claim 4, the Examiner noted that "variables A, B, and r" were not defined in the claim, and that claim 5 inherited indefiniteness from claim 4, on which it depends. Claim 4 is amended to include definitions of variables r and θ that correspond with use of these variables in the specification. Applicant notes that A and B are functions, not variables per se, and are intended to be undefined except to denote in standard algebraic form that A depends on both r and θ , while B depends on r alone. Applicant contends that the amendment to claim 4, taken in context with the specification as filed, render claim 4 definite, and requests reconsideration and withdrawal of the rejection of claims 4 and 5 under 35 U.S.C. §112.

In claim 9, the Examiner noted that "variables P, D, x and y" were not defined in the claim. Applicant has cancelled claim 9.

In claim 20, the limitation "the characteristic[s]" is held to have insufficient antecedent basis. Applicant amends claim 20 to substitute "properties" for "characteristics," and notes that independent claim 1, from which claim 20 depends,

recites "image properties." Reconsideration and withdrawal of the rejection of claim 20 under 35 U.S.C. §112 is accordingly requested.

6. - 9. Claim Rejections - 35 USC §102

Claims 1, 2, 6-8, 14, 20-22 and 25 stand rejected as being anticipated by U.S. Patent No. 5,233,431 ("Yoshida"). Claims 1, 2, 4, 10-12, 15-17 and 20 stand rejected as being anticipated by U.S. Patent Application Publication No. 2004/0165253 ("Cathey"). Applicant respectfully disagrees.

However, in order to advance the application to allowance, Applicant amends claim 1 to include limitations of claim 13 to obtain allowability as indicated in the current Office Action, and cancels claim 13 without prejudice, based on the above arguments. We therefore request reconsideration and withdrawal of the rejection of claim 1 as anticipated by Yoshida and/or Cathey under 35 U.S.C. §102(b).

Claims 2, 4, 6-8, 10-12, 14, 16-17, 20-21 depend directly or indirectly from claim 1 and benefit from like arguments; Applicant therefore requests reconsideration and withdrawal of the rejection of claims 2, 6-8, 14, 20-21 as anticipated by Yoshida and/or Cathey under 35 U.S.C. §102(b).

Claim 25 is amended to depend from claim 23, which has been rewritten in independent form including limitations of its previous base claim 22, as suggested by the Examiner. Since claim 23 is indicated as allowable, claim 25 benefits from like arguments, and we request reconsideration and withdrawal of the rejection of claim 25 as anticipated by Yoshida under 35 U.S.C. §102(b).

Claims 15 and 22 are canceled herewith without prejudice and may be pursued in a continuation or divisional application.

10. and 11. Claim Rejections - 35 USC §103(a)

Claims 3 and 9 stand rejected as being unpatentable over Cathey. Claim 5 stand rejected as being unpatentable over U.S. Patent No. 5,322,998 ("Jackson").

Claims 3 and 5 depend from claim 1, which has been amended to incorporate limitations of previous claim 13 that was indicated as allowable if rewritten as an independent claim incorporating limitations of its base claim (claim 1). Since claim 1 now incorporates limitations of previous claim 13, claim 1 is allowable over the art of

record; claims 3 and 5 depend from claim 1 and benefit from like arguments. We therefore request reconsideration and withdrawal of the rejection of claims 3 and 5 as unpatentable over Cathey and Jackson respectively.

Claim 9 is canceled herewith without prejudice and may be pursued in a continuation or divisional application.

12. - 15. Allowable Subject Matter

We appreciate the allowance of claims 26-29.

Applicant notes the Examiner's indication of claims 13, 23 and 24 as allowable if rewritten in independent form including limitations of the base claims and intervening claims. Claim 1 is rewritten to include limitations of previous claim 13, instead of rewriting claim 13 as an independent claim, and claim 13 has been cancelled. Claim 23 is rewritten as an independent claim including limitations of its previous base claim.

Applicant notes the Examiner's indication of claims 18 and 19 as allowable if rewritten to overcome the claim objection set forth in the Office Action, including limitations of the base claims and intervening claims. Claim 18 is rewritten in independent form including these limitations. No objection to claim 19 was included in the present Office Action. Applicant presumes the Examiner meant to include an objection due to dependence of claim 19 from objected-to claim 18; any such rejection is now moot due to the amendment of claim 18.

Conclusion

In view of the above Amendments and Remarks, Applicant has addressed all issues raised in the Office Action dated 19 April 2005, and respectfully solicits a Notice of Allowance. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

Pursuant to 37 CFR 1.16(h), the \$200.00 fee for one additional independent claim should be applied against our Deposit Account No. 12-0600. Applicant believes no further fees are due, however, if any fee is deemed necessary in connection with this Amendment and Response, please charge Deposit Account No. 12-0600.

Respectfully submitted,

LATHROP & GAGE L.C.

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